

WHERE ARE THE BABIES?



ENGAGING UNDER TWOS WITH THE OUTDOORS

Nicola Kemp & Jo Josephidou

INTRODUCTION TO AUTHORS

NICOLA KEMP

Nicola is a senior lecturer in the Faculty of Education at Canterbury Christ Church University where she is the Programme Director for the MA in Early Childhood Education as well as the co-lead for sustainability research. With an academic background in rural and environmental geography, her research interests include children's connection with nature, outdoor learning and sustainability education. She is currently leading a Froebel Trust funded project on outdoor provision for under twos in early childhood settings as well as a project exploring the educational potential of Harmony, a form of sustainability education.



JO JOSEPHIDOU

Jo is a lecturer in Early Childhood at the Open University. She was a primary school teacher before entering Higher Education to work in ITE (Initial Teacher Education) and then ECS (Early Childhood Studies) at the University of Cumbria and Canterbury Christ Church University. Her own research has focused on appropriate pedagogies with young children and how practitioner gender may impact on these. She is also working with Nicola on the Froebel Trust project 'A life 'in and with nature?' An exploration of outdoor provision in baby rooms' and is a co-author of the blog 'Contemplatingchildhoods.com'.



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This report is the first stage of a research project made possible by funding from the Froebel Trust. The outdoors is central to Froebelian philosophy and practice and, for Froebel, experiences in the earliest period of childhood were particularly significant since the 'whole being is here only an appropriating eye...'. This research is inspired by his understanding that 'Life in and with nature, and with the clear, still objects of nature must be fostered at this time by the parents and members of the family as the chief point of reference of the whole child-life' and seeks to explore its significance in contemporary practice. (Froebel, F. (1826) *The Education of Man*. Translated by Jarvis 1885. New York: A. Lovell and Company.)

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All images used have kindly been provided with permission by parents and practitioners – thank you!

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EXECUTIVE SUMMARY

There is a general concern that children are not spending enough time outdoors. The growing number of very young children in the UK and beyond who now spend time in formal day care suggest that it is important to know more about outdoor provision for under twos. This report is based on the first stage of a research project funded by the Froebel Trust which involved reviewing the international research literature on this topic. We identified five key ideas from this review which are summarised below.

Outdoors as under-researched: Published research on the topic of outdoor provision for under twos in Early Childhood Education and Care (ECEC) is scarce and our systematic review of international research literature yielded only 21 papers. Little is known about the access the youngest children have to outdoor environments whilst in formal day care or what their experiences are like.

Outdoors as a space to be physically active: Many of the papers associated the outdoor environment with a space to engage in physical activity; in such a context the physically active child is seen as the 'ideal' child. Within the papers that focused on physical activity, we saw an assumption that the outdoor environment was only appropriate for those children who could already walk.

Outdoors as a risky space: The idea that the outdoors is a risky space for babies is revealed in their absence from the research literature. One reason for this suggested in some papers are practitioner concerns about being able to keep the very youngest children safe outside. This concern about risk is also reflected in the resourcing of the outdoor areas deemed suitable for the younger age group which are characterised by being 'artificial, 'safe' and non-challenging play environments.'

Outdoors as a space full of possibilities: Outdoor provision needs to be both flexible, varied and multifaceted to fully support the holistic nature of young children's development. Research shows that the nature and extent of the outdoor environment impacts on how young children use it. Natural features appear to be important in encouraging quality opportunities for young children in the outdoors.

Outdoors and the knowledgeable adult: Researchers agree that the role of adults is critical in contributing to positive and effective experiences for babies and toddlers outdoors. There are concerns that practitioners may engage in more passive behaviours outside which are not supportive of young children's learning and development. If practitioners feel comfortable outdoors, then they will be able to provide the best experience for children also. Parental perspectives are also important in influencing practice.



1. INTRODUCTION

There is a general concern that children are not spending enough time outdoors. This is a concern not just in the UK context, but one seen internationally. We know that both early years settings and schools have an important role to play in getting children outside enjoying nature. We also know that there is lots of international research that tells us how the outdoors can support children with their learning. But if we look closely at this research, we can see that it usually focuses on children who are three or older. It's difficult to find anything that looks at what those below this age could or should be doing when and if they are outdoors¹.

The growing number of very young children in the UK and beyond who now spend time in formal day care² suggests that it is important to know more about outdoor provision for under twos. There are different ways of organising this provision depending on the geographical context. For example, in the UK children as young as six weeks are looked after outside the home whereas in Scandinavia, it is rare to see children younger than one in formal day care. However once children reach the age of one in a country such as Norway, most of them will enter some kind of early years setting; in the Norwegian context there also appears to be an implicit assumption

that babies will sleep outside even in relatively low temperatures.³ In North America, an estimated 17% of birth to two years are in day care. In many formal settings, and certainly in the UK, the children are grouped by age, often in a baby room, so that babies and toddlers are separate from older children. We therefore need to find out, and understand, what are the opportunities for this younger age group outdoors.

This report is based on the first part of a research project funded by the Froebel Trust to find out about provision for birth to twos' engagement with the outdoor environment in ECEC settings.

1 Bilton, H., Bento, G. & Dias, G. (2017) *Taking the first steps outside*. Oxon: Routledge.

2 Gooch, K. and Powell, S. (2013) *The Baby Room*. Maidenhead; Open University Press.

3 Ulla, B. 2017. "Reconceptualising sleep: Relational principles inside and outside the pram". *Contemporary Issues in Early Childhood* 18 (4): 400-408.

2. WHAT WE DID: A REVIEW OF THE RESEARCH LITERATURE

We engaged in a search of the international research literature to find any journal articles, written in English, relevant to babies' and toddlers' engagement with the outdoor environment whilst in formal day care.

2.1 OUR SEARCH STRATEGY

We used six databases (LibrarySearch; Injenta Connect; the British Educational Index, Child Development and Adolescent Studies, Education Resources Information Center and Google Scholar) focussing on titles and key words but placing no limit on date of publication. The following search terms were used: babies, toddlers, infants, under twos, baby rooms, day care, outside, outdoors, nature, physical activity, sleep, physical development. In addition to this search, we also talked to personal contacts, authors and experts in this area to ensure we had not missed any other important sources.

2.2 HOW DID WE CHOOSE WHICH PAPERS TO INCLUDE AND EXCLUDE IN OUR WRITE UP?

Each paper which came to our attention through the above search strategy was reviewed to see if it was relevant. We did this by reading through the abstract and deciding which to keep in the search and which to exclude. We discarded all those which made no reference to:

- children two and under;
- the outdoors;
- the ECEC setting.

We also discounted any paper that was not peer-reviewed and/or was not published in an academic journal. We read all the papers that were left after this process of elimination and then used their content to write this review. We also considered all the references at the end of each paper, ignoring those that were not written in English. All papers were reviewed to look for any common themes which would help us understand more about what outdoor provision is currently available for babies and toddlers when they are in formal day care.

2.3 WHAT WERE THE LIMITATIONS OF OUR SEARCH STRATEGY?

We have used 21 papers to complete this literature review. We also cite some other peripheral papers, policies, guidance and texts which were cited in these 21 papers and which we deemed worthy of further investigation. We are aware that we are academics working within an English context reviewing only papers written in English; as such we know that we are only offering one perspective. One difficulty we encountered was the different ways used to describe both settings (daycare, childcare, babyrooms, early childhood education and care) and the young children who attended them (babies, toddlers, infants, under twos, under threes).



3. WHAT WE FOUND OUT

We identified five dominant ideas in the papers we reviewed about outdoor provision for babies and toddlers. These are:

1. Outdoors as under-researched
2. Outdoors as a space to be physically active
3. Outdoors as a risky space
4. Outdoors as a space full of possibilities
5. Outdoors and the knowledgeable adult

We will now discuss each of these ideas in turn.

3.1 OUTDOORS AS UNDER-RESEARCHED

The research evidence about outdoor provision for under twos is scarce. The 21 papers we eventually reviewed focus on practice within the context of Scandinavia, USA, Canada, Austria, Portugal, Ireland; there were none from the UK context. Several were based on practice in Norway possibly reflecting the fact that once Norwegian children become one most of them attend a formal care setting⁴. However, this also means that even in this context children under one are not represented.

Little is known about the amount of time the youngest children actually spend outdoors when in formal daycare. Scandinavia is particularly recognised for its outdoor culture and there is some evidence which suggests that even young children spend significant amounts of time outside whilst in daycare. In Norway, one study⁵ found that children aged 1-3 are outdoors 1.6 hours every day on average but the range is 0.5 – 3.4 hours. Another study⁶ found over half of teachers reported spend time outdoors every day for 60-90 minutes with the youngest children even in winter. However, babies under one are not represented in this data and it is based on self-reporting so may over-estimate actual time spent outside.

In the USA (Caring for Our Children⁷) best practice recommendations are that infants should be taken outside 2-3 times per day and toddlers should have 60-90 minutes of outdoor play daily. However, Dinkel et al (2019) found that these recommendations were not followed in their study of two settings in the USA.

3.2 OUTDOORS AS A SPACE TO BE PHYSICALLY ACTIVE

Many of the papers associated the outdoor environment with a space to engage in physical activity; in such a context the physically active child is seen as the 'ideal' child. One explanation for this is that the ECEC setting is considered as a place where concerns about children's health can be addressed. Benjamin Neelon et al. (2015: 33)⁸ suggest that settings may be 'important targets for obesity prevention' and many of the papers pick up on the idea that a key purpose of ECEC is to be responsive to public health policy. Several of the papers discuss how physical activity guidelines are followed although there is a lack of consistency across countries in terms of recommendations for the under twos:

- **UK:** It is recommended that toddlers spend at least 180 minutes in a variety of physical activities at any intensity including active and outdoor play spread through the day, but no mention is made of infants outdoors⁹.
- **Australia:** There are specific guidelines for birth to five. Non-mobile infants should spend at least 30 minutes of tummy time and toddlers should spend at least 180 minutes engaging in physical activity. Although no specific reference is made to the outdoors the guidance says "Don't be restricted by your environment – you can be safe and active in all seasons, in all weather, indoors, and outdoors."
- **Canada:** the guideline of 180 minutes daily physical activity applies only to 1-5-year olds.

4 Kaarby, K. and Tandberg, C. 2018. "ITERS-R as a tool for improving quality in Norwegian ECEC settings: A critical reflection". *Journal of the European Teacher Education Network* 13: 58-70.

5 Kaarby, K. and Tandberg, C. 2017. "The belief in outdoor play and learning". *Journal of the European Teacher Education Network* 12: 25-36.

6 Kaarby & Tandberg (2017)

7 Caring for Our Children best practice guidelines available at: <https://nrckids.org/CFOC>

8 Benjamin Neelon, S., Schou Andersen, C., Schmidt Morgen, C., Kamper-Jorgensen, M., Oken, E., Gillman, M. and Sorensen, T. 2015. "Early Child Care and obesity at 12 months of age in the Danish National Birth Cohort". *International Journal of Obesity* 39 (1): 33-38

9 Department of Health and Social Care (2019) *UK Chief Medical Officers' Physical Activity Guidelines* Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/832868/uk-chief-medical-officers-physical-activity-guidelines.pdf

Within the papers that focused on physical activity, we saw an assumption that the outdoor environment was only appropriate for those children who could already walk. Even when it was clear that settings provided for very young babies, the focus in the research was on those children who could engage in a variety of physical movements more relevant for an older age group. For example, in Dinkel et al.'s (2019)¹⁰ US based study of infants and toddlers (some identified as being as young as 6 weeks old) the researchers talk about those children who can climb, run, sit, squat and stand. We noticed a similar assumption in other papers that the outdoors is for older children and that babies will be inside. Only one paper¹¹ references any pedagogical guidelines for this younger age group. Bento and Costa considered how the Portuguese Pedagogical Guidelines (birth to three) could be linked to young children's outdoor experiences. They looked at the areas of self-esteem, curiosity and social skills by observing children and interviewing practitioners. Even though they did indeed find the outdoors to be an optimal environment for a child's development in these areas, once again the focus was on those children who could already walk and therefore who were mainly two to three years old. There was just one mention of the younger age group and that the 'the younger children were a bit insecure outside. They showed some difficulties...they hardly explored the space autonomously' (p. 294). Within the papers we reviewed which focused on physical activity, the youngest children were always missing.

3.3 OUTDOORS AS A RISKY SPACE

The idea that the outdoors is a risky space for babies is revealed in their absence from the research literature. Throughout this review, we read papers which promised a focus on under twos or birth to threes but found a sustained focus on toddlers leading us to ask, 'where are the babies?'

One reason for this suggested in some papers were practitioner concerns about being able to keep the very youngest children safe outside. For example, if older children were playing on equipment such as bikes it was important to keep the babies apart so that they would not be in any danger. This was apparent in one paper in the Australian context¹² where children of different ages shared one outdoor learning environment. When interviewed, practitioners revealed that although they saw many benefits to this vertical grouping of children, they had concerns around keeping the youngest children safe whilst supervising the older children. In practice then, out of necessity, the babies became 'isolated in a small play space to keep them safe.' (Rouse, 2015: 748). In this way we see a clear connection between risk management concerns and the invisibility of the youngest children in the outdoor environment.

This concern about risk is also reflected in the resourcing of the outdoor areas deemed suitable for the younger age group. Often, they are resourced in such a way that there is little challenge for the children¹³ leading to a proliferation of 'artificial, safe and non-challenging play environments' for the youngest children. Some suggest that quality guidelines such as Infant and Toddler Environment Rating Scale-Revised (ITERS-R¹⁴), which is used widely, places an inappropriate emphasis on structural and safety issues and has contributed to the creation of uninspiring outdoor environments. Some countries such as Norway, seem to have different interpretations of risk and safety. Here children are not separated outdoors according to age group, which is a mark of quality according to ITERS. Indeed, one Norwegian study¹⁵ explores the extent to which different settings encourage risky play for the under threes. They found that the youngest children engaged in more risky play indoors and suggested that the outdoor environment may need to include both natural and manufactured resources to offer enough variation and challenge to support risk-taking for the youngest children.

10 Dinkel, D., Snyder, K., Patterson, T., Warehime, S., Kuhn, M. and Wisneski, D. 2019. "An exploration of infant and toddler unstructured outdoor play". *European Early Childhood Education Research Journal* 27 (2): 257-271.

11 Bento, G. and Costa, J. 2018. "Outdoor play as a mean to achieve educational goals – a case study in a Portuguese day-care group". *Journal of Adventure Education and Outdoor Learning* 18 (4): 289-302.

12 Rouse, E. 2015. "Mixed-age grouping in early childhood – creating the outdoor learning environment". *Early Child Development and Care* 185 (5): 742-751.

13 Morrissey, A., Scott, C. and Wishart, L. 2015. "Infant and toddler responses to a redesign of their childcare outdoor play space". *Children, Youth & Environments* 25 (1): 29-56.

14 <https://ers.fpg.unc.edu/infanttoddler-environment-rating-scale%20AE-revised-iters-r%E2%84%A2>

15 Kleppe, R. 2018. "Affordances for 1-3-year olds' risky play in Early Childhood Education and Care". *Journal of Early Childhood Research* 16 (3): 258-275

3.4 OUTDOORS AS A SPACE FULL OF POSSIBILITIES

Outdoor provision needs to be both flexible, varied and multifaceted to fully support the holistic nature of young children's development.

Some researchers use Gibson's concept of affordances (1986)¹⁶ to consider the range of opportunities the outdoor environment could offer to very young children, opportunities to encounter a range of experiences, to manipulate their environment and to engage in a range of behaviours. The challenge, is that such spaces '*need to accommodate the needs of young babies, crawling infants, new walkers and active climbers.*' (Thigpen, 2007:20). This can mean that it is very difficult to create an outdoor environment that contains both actual and potential affordances for all.

Research has demonstrated that the nature and extent of the outdoor environment impacts on how young children use it. For example, large open play areas encourage more physical activity as do those with edging and inclines. Hall *et al.* (2014)¹⁷ emphasise the importance of 'provocative' ground surfaces and structures such as mounds of grass, particularly important if we take into consideration the length of time that young children spend on the ground.

Natural features appear to be important in encouraging quality opportunities for young children in the outdoors. The importance of young children being able to access rich and diverse local ecosystems from a very early age is emphasised in some papers. One example of this is Byrd-Williams *et al* (2019)¹⁸ who drew upon the *Natural Learning Initiative's Best Practice Indicators for a Model Outdoor Learning Environment Toolkit* developed by Moore & Cosco (2014).¹⁹ This toolkit, which does not specifically focus on babies and toddlers, recognises the importance of natural features such as looping pathways, shade, trees, edible landscapes, vegetable gardens, loose parts and outdoor classrooms and storage. The natural environment supports multi-sensory engagement opportunities which the indoor environment is unable to offer yet which impacts greatly on healthy development. Practitioners carried

out research in one setting in Colorado, USA²⁰ finding that such an environment was '*a place for hands-on learning about the world of nature*' (p. 206). As they closely observed the babies they noted how '*they used their eyes, hands, feet, mouths and entire bodies to experience the minutia*' (p. 198).

3.5 OUTDOORS AND THE KNOWLEDGEABLE ADULT

Researchers agree that the role of adults is critical in contributing to positive and effective experiences for babies and toddlers outdoors.

This includes the importance of detailed and continual observation to understand young children's outdoor behaviours.

There are concerns that practitioners may engage in more passive behaviours outside which are not supportive of young children's learning and development. Sometimes this can be because practitioners may assume that being outside is enough and that their role is more one of surveillance. In their study of two US settings, Dinkel *et al* (2019)²¹ noted that practitioners seldom initiated or intervened in any activities the children engaged in outdoors. However, their study highlights the need to find a balance between promoting opportunities for free, unstructured play and other ways of being outside. In some cases, the practitioners were seen to hinder the children's engagement. For example, practitioners would discourage children from certain behaviours which they felt to be hazardous, such as touching plants. In the Australian context²² researchers found that not only did practitioners not always encourage exploration of the greened outdoor space, but that there were times when this was actively discouraged; specific reference was made to a stick shelter which was felt to be unsafe. However, some papers suggested that rather than criticise practitioners for these behaviours that they should be supported to become more comfortable in their role outdoors.

16 Gibson, J. (1986) *The ecological approach to visual perception*. Lawrence Erlbaum Associates: Hillsdale, NJ.

17 Hall, E., Linnea Howe, S., Roberts, S., Foster Shaffer, L. and Williams, E. 2014. "What can we learn through careful observation of infants and toddlers in nature?" *Children, Youth & Environments* 24 (2): 192-214.

18 Byrd-Williams, C., Dooley, E., Thi, C., Browning, C. and Hoelscher, D. 2019. "Physical activity, screen time, and outdoor learning environment practices and policy implementation: a cross sectional study of Texan child care centers". *BMC Public Health* 19:274.

19 Moore, R. and Cosco, N. 2014. "Growing Up Green: Naturalization as a Health Promotion Strategy in Early Childhood Outdoor Learning Environments". *Children, Youth and Environments* 24 (2): 168-191.

20 Hall, E., Linnea Howe, S., Roberts, S., Foster Shaffer, L. and Williams, E. 2014. "What can we learn through careful observation of infants and toddlers in nature?" *Children, Youth & Environments* 24 (2): 192-214

21 Dinkel, D., Snyder, K., Patterson, T., Warehime, S., Kuhn, M. and Wisneski, D. 2019. "An exploration of infant and toddler unstructured outdoor play". *European Early Childhood Education Research Journal* 27 (2): 257-271.

22 Morrissey, A., Scott, C. and Wishart, L. 2015. "Infant and toddler responses to a redesign of their childcare outdoor play space". *Children, Youth & Environments* 25 (1): 29-56.



If practitioners feel comfortable outdoors, then they will be able to provide the best experience for children also.

Hall *et al.* (2014: 202) argue that, '*children's developmental growth in outdoor spaces is supported when adults themselves delight in the learning that occurs in the natural world*'. Similarly, Bento and Dias²³ conducted a three-year action research project in the Portuguese context and concluded that '*it is fundamental to promote conditions for adults to feel comfortable and motivated during the time spent outside. Adult involvement will influence the type of experiences that children have access to.*' A later paper²⁴ based on the same research noted how practitioners were frequently involved in the children's play and they seemed happy to be outside suggesting the project had been successful.

Some research highlights the impact of parents' perspectives in influencing practice.

Parents were variously seen to have little knowledge and understanding of outdoor provision, or conversely lacked an understanding that they also had a responsibility to encourage engagement with the outdoors. For example,²⁵ Carsley *et al.* (2016) carried out a study in the context of Canada and found that 1-2-year olds attending day care experienced a shorter duration of outdoor free play at home by an average of almost 15 minutes per day. For under 3s attending day care full-time the difference was greater - 22 min less outdoor free play at home compared with children not attending day care.

23 Bento, G. and Dias, G. 2017. "The importance of outdoor play for young children's healthy development". *Porto Biomedical Journal* 2 (5): 157-160.

24 Bento, G. and Costa, J. 2018. "Outdoor play as a mean to achieve educational goals – a case study in a Portuguese day-care group". *Journal of Adventure Education and Outdoor Learning* 18 (4): 289-302.

25 Carsley, S., Liang, L., Chen, Y., Parkin, P., Maguire, J. and Birken, C. 2016. "The impact of daycare attendance on outdoor free play in young children". *Journal of Public Health* 39 (1): 145-152.

4. REFLECTIONS ON OUR FINDINGS

As we reflect on the limited research, we conclude that there are two key ways of talking about babies and toddlers being outdoors when attending the ECEC setting. For babies, the predominant way to talk about them is the idea of keeping them safe whereas for toddlers it is more about them being active. By talking about babies and toddlers in this way we are limiting possibilities for them in them in the outdoor environment.

The research literature provides illustrations of how possibilities can be created and different ways of being outdoors can be provided for young children; ways which include their preferences in terms of learning and development. These preferences include sensory engagement, sleeping and movement. We see this in Hall *et al.*'s²⁶(2014) observations of babies outdoors and their multi-sensory engagement with nature, with Ulla's²⁷ (2017) call for sleeping to be included as part of pedagogical practice and international good practice guidelines which highlight the importance of limiting practices which restrict the movement of babies, providing more opportunities for them to move freely both indoors and outdoors.

None of these ways of being outdoors for young children are possible without knowledgeable, informed adults. The review of the literature has highlighted how the attitudes of practitioners to the outdoors is important, for they can at times be an active barrier to young children's positive engagement, perhaps even reinforcing a view that the outdoors is somehow not as safe as indoors. The inference that the youngest children need to be kept safe from older children when outdoors fails to acknowledge the potential benefits of younger children being able to watch and engage with older children 'being' outdoors.²⁸ In addition, this segregation teaches older children that they are not responsible for the wellbeing of others.



Finally, we consider it would be beneficial to reflect on the nature and extent of outdoor environments provided for the very youngest children. Research suggests that quality frameworks, such as *ITERS-R*, are limited and potentially limiting. It may be beneficial to explore alternatives which consider more broadly the characteristics an outdoor environment could provide such as those summarised by Woolley and Lowe:²⁹enticing, stimulating, challenging, educational and inclusive.

26 Hall, E., Linnea Howe, S., Roberts, S., Foster Shaffer, L. and Williams, E. 2014. "What can we learn through careful observation of infants and toddlers in nature?" *Children, Youth & Environments* 24 (2): 192-214.

27 Ulla, B. 2017. "Reconceptualising sleep: Relational principles inside and outside the pram". *Contemporary Issues in Early Childhood* 18 (4): 400-408.

28 Rouse, E. 2015. "Mixed-age grouping in early childhood – creating the outdoor learning environment". *Early Child Development and Care* 185 (5): 742-751.

29 Woolley, H. and Lowe, A. 2013. "Exploring the relationship between design approach and play value of outdoor play spaces" *Landscape Research* 38 (1): 53-74.



5. CONCLUSION

We conclude by reiterating that research which focuses on babies' and toddlers' engagement with the outdoor environment when attending formal settings is scarce. The research that does exist reveals two dominant ideas within current practice. These are being safe and being active yet the impact of both is that babies are often excluded from the outdoors. Different ways of talking about babies outdoors need to be developed, ways which recognise the potential of the outdoors in terms of sensory stimulation, sleeping and movement. Knowledgeable adults (both practitioners and parents) are needed to support these experiences and to develop and extend the environment being offered.

We suggest that further research is needed in relation to outdoor provision for the youngest children in settings.

This report is the first stage of a funded research project which involves auditing outdoor provision within one county in England (Kent) and undertaking case studies of practice. The results of these subsequent stages will be published in due course and we hope that this report will initiate further interest in this previously neglected area of practice.

FACULTY OF EDUCATION

Canterbury Christ Church University
North Holmes Road | Canterbury | Kent CT1 1QU

education@canterbury.ac.uk
www.canterbury.ac.uk/education

